



Landscaping Sector

EPA Region 2

Pollution Prevention



The U.S. Environmental Protection Agency is working to reduce releases of toxics from small businesses during extreme weather events (e.g., flooding and storm surge events). This bulletin highlights pollution prevention opportunities for increasing the success, competitiveness, and overall resilience of your business. Pollution prevention strategies which include the use of environmentally friendly products and practices, can reduce the risk of improper chemical management, limit liability, save money, and increase worker and customer satisfaction.

Did You Know?

All pesticides have health risks associated with their use. Even low toxicity pesticides have risks - depending on the level of exposure. Pesticides are especially harmful to children and pregnant women which is why care must be taken when using these chemicals.

Pesticides have short and long-term health effects - with greater risks occurring with prolonged exposure. Landscape employees who apply pesticides should always use safe storage and handling protocols and all recommended personal protective equipment to ensure their health and safety. Also, material safety data sheets should always be available so employees and homeowners know the health risks associated with the specific pesticide(s) being used.

Pesticides that escape into the environment as pollutants can cause damage to the surrounding ecosystem. Therefore, in addition to protecting themselves, applicators are asked to be environmentally conscientious, utilizing application techniques and timing that reduce chemical runoff, especially into waterways. All applicators must be licensed and trained by the state they are working in prior to making any pesticide application. Integrated Pest Management, which combines traditional pest control techniques with a deeper understanding of pest life cycles and behavior, can be employed by landscape companies to reduce overall pesticide use and limit pesticide exposure to the environment beyond the application site.

Additional Information:

EPA Region 2 Pollution Prevention Toxics Mitigation Program:
http://www.epa.gov/region02/p2/other_p2_prog_init_actv.html

EPA "Large Scale Landscapes:"
<http://www.epa.gov/osw/conserve/tools/greenscapes/lrgscl.html>

EPA PestWise Partnership Program:
<http://www.epa.gov/pestwise/landscaping/index.html>

EPA WaterSense Professional Certification:
<http://www.epa.gov/watersense/outdoor/pros.html>

Rutgers Organic Land Care Program:
<http://njaes.rutgers.edu/organiclandcare/>

Success Stories

Hydro Green Marlton, New Jersey

Over a three year period, Hydro Green worked with a residence in Moorestown, NJ who was interested in reducing water use. Hydro Green's bio nutritional applications helped reduce water use by this client by at least 60% and completely eliminated repetitive fungicide applications.

At a second residence, also in Moorestown, NJ, Hydro Green worked to reverse severe die back of the front lawn. The client was able to forgo seeding and eliminate fungicide and insecticide applications following a lawn care program that included bio nutrition applications.

Marizco Landscaping Santa Rosa, California

Airport Business Center (ABC):

Marizco worked with ABC to reduce water use. Marizco created a water-efficient landscape by replacing 3000 sq ft of turf grass with drought-tolerant and low-water use plants – helping ABC [reduce water use by 72%](#).

Altamont Apartments:

Marizco worked with Altamont Apartments to reduce costs and improve the look of their lawn area. Marizco replaced some turf grass with low to medium water-use plants. It also converted the irrigation system to a drip system. These changes helped the customer [reduce water use by 65% - 77% annually](#). Replacing the turf also allowed the client to eliminate gas powered mowers thus reducing air pollution as well.

CREDITS

Special thanks goes to Hydro Green and to Marizco Landscaping for providing these four success stories.

Landscaping Insights



Equipment and Technology

- If gas powered tools are the only option, then look for 4-cycle engines which are less polluting.
- Look for tools which run on natural gas or propane.
- Switch over to electric versions.
- Upgrade to landscaping tools with more efficient engines which can also save you money long-term.
- Look for tools that can perform well with lower concentrations of ethanol such as E-10 instead of E-85.
- Use water-efficient irrigation controllers on job sites. Look for the EPA approved Water Sense logo.

Materials Usage and Storage

- Do not apply fertilizer near sidewalks or driveways.
- Opt for a slow release organic fertilizer instead of applying fertilizer multiple times a year.

Operations Management

- Increase the cutting height for lawns to reduce browning and weed growth which would require less watering.
- Shred wood and leaf wastes to use as mulch which can save you money as well.

Meeting Customer Demands

- Consider adding the following to your list of services:
 - Participation in the WaterSense Irrigation Partners in Action Certification Program
 - Construction of Rain Gardens
 - Creating Bio-swales
 - Use regionally appropriate, low water-using & native plants
 - Group plants according to their water needs

Invitation

You are invited to share your own success stories and additional best management practices with the EPA Pollution Prevention and Climate Change Section for consideration in our next bulletin!

Tell us what problem or challenge your small business faced, what steps you took to overcome it and how or why it resulted in a successful outcome. Provide details like the ones you see in this bulletin that explain how your actions resulted in cost savings, operating efficiency improvements, or other measurable successes.

Your story could be featured in our next bulletin to serve as an example for other small businesses.

For more information and to find out how YOU can submit your success story, send an e-mail to us at: Region2_PollutionPrevention@epa.gov or visit us at: <http://www.epa.gov/p2/comments.htm>

Special thanks to:

The [HORTUS DESIGN SUSTAINABLE LANDSCAPES](http://www.hdsustainablelandscapes.com/index.html) web site for some of the "Insights" information. (<http://www.hdsustainablelandscapes.com/index.html>)

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